

# UNITED STATES PATENT AND FRADEMARK OFFICE

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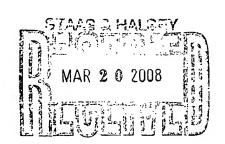
UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

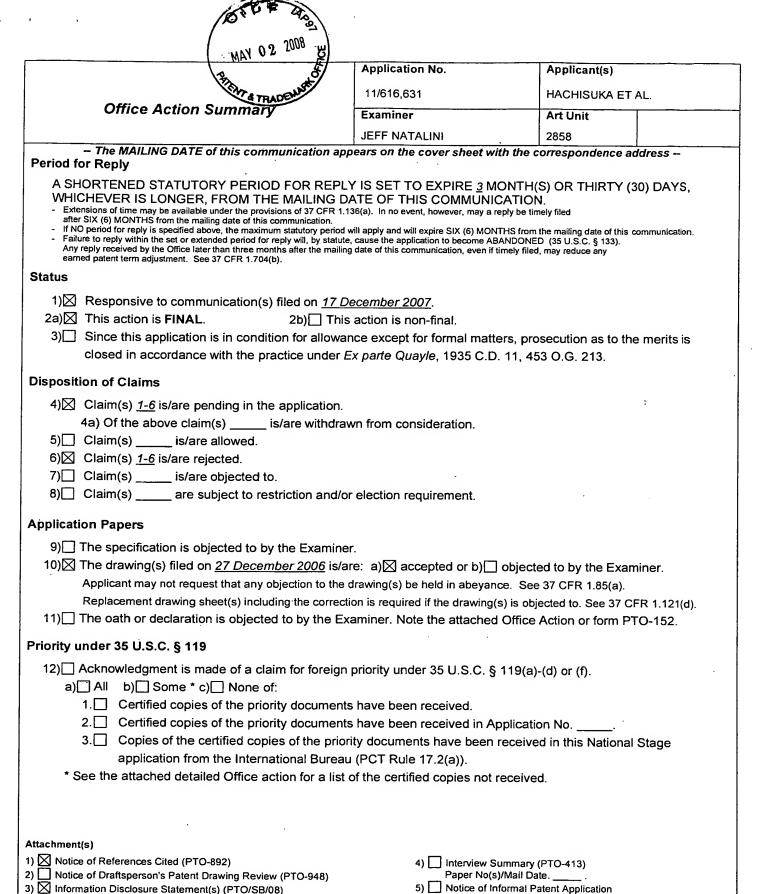
APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. T NAMED INVENTOR CONFIRMATION NO. 11/616,631 12/27/2006 Seiji Hachisuka 1720.1003D2 2853 7590 03/18/2008 **EXAMINER** STAAS & HALSEY LLP SUITE 700 NATALINI, JEFF WILLIAM 1201 NEW YORK AVENUE, N.W. ART UNIT PAPER NUMBER WASHINGTON, DC 20005 2831 MAIL DATE **DELIVERY MODE** 03/18/2008 PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

COPIES OF REFERENCES ORDERED





Paper No(s)/Mail Date 2/8/08, 11/1/07, and 10/12/07.

6) Other:

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#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al. (4985819) in view of Ribarich et al. (20020158591).

Mori et al. discloses a device comprising:

(claims 1-6) an anomaly detection circuit that detects anomaly caused by disconnection discharge in circuit wiring of said inverter (inverter- figures 4 and 5-element 5; col 4 line 20-23 discloses determining faults in the wiring of the inverter, see also col 4 lines 47-55)

(claims 1-6) wherein said anomaly detection circuit includes a current detection part provided at a DC input side of said inverter (see figures 4 and 5, element 17 labeled in 5), wherein said current detection part detects magnetic flux change which occurs in the circuit wiring of the inverter at the DC side of said inverter (see figures 4 and 5, left/DC side of inverter) and detects change in a circuit current of said inverter due to said discharge through the medium of the detected magnetic flux change (col 4 line 24-55)

(claim 6) wherein said current detection part includes a detecting conductor (figure 4 and 5- element 14) that is arranged in the vicinity of said circuit wiring and is on

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a circuit board (element 14 show the board hook up as it is attached to the other circuitry/wiring), and detects the magnetic flux change by said detecting conductor (col 4 line 26-36).

Mori et al. lacks specifically wherein

(claims 1-6) a control part that stops an operation of said inverter when an anomaly detection circuit detects an anomaly.

(claim 2) a display driving part that generates a display driving output representative of the anomaly when the anomaly is detected and an indicator that displays behavioral anomaly by the display driving output,

(claim 4) a fluorescent light tube including an inverter

Ribarich discloses in a fluorescent ballast,

(claims 1-6) a control part that stops an operation of said inverter when a fault/anomaly is detected (figure 1, microprocessor element 22; page 2 paragraphs 22-24)

(claim 2) a display driving part that generates a display driving output representative of the anomaly when the anomaly is detected (figure 1 pc/user interface shown under 10 and connected to label 20) and an indicator that displays behavioral anomaly by the display driving output (figure 1 element 10; page 2 paragraph 28)

(claim 4) a fluorescent light tube (figure 1 element 26 – abstract/title) including an inverter (figure 1 element 18).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Mori et al. to include a control part to stop operation of the

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inverter/lamp when a fault was detected as well as having a display and a lamp as taught by Ribarich in order to not waste electricity when there is a fault in the system which also will allow safety if the inverter or bulb needs to be fixed or replaced (page 2 paragraph 24).

## Response to Arguments

2. Applicant's arguments with respect to claims 1-5 (and also the statement about new claim 6) have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFF NATALINI whose telephone number is (571)272-2266. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diego Gutierrez/ Supervisory Patent Examiner, Art Unit 2831

Jeff Natalini



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citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

/Jeff Natalini/

**EXAMINER** 

03/11/2008

DATE CONSIDERED



(Use several sheets if necessary)

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE

PATENT AND TRADEMARK OFFICE

Sheet 1 of 1 ATTORNEY DOCKET NO. 1720.1003D2 11/616,631 FIRST NAMED INVENTOR

INFORMATION DISCLOSURE STATEMENT

Seiji HACHISUKA et al.

FILING DATE

GROUP ART UNIT

December 27, 2006 2858

**U.S. PATENT DOCUMENTS** 

			ITT DOCUMENTO			
	DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
AA	5,903,159	05/11/1999	Miyata et al.		···	
AB	6,252,409	06/26/2001	lijima			-
AC	7,098,677	08/29/2006	Kazama et al.			
AD	2001/0019492	09/06/2001	Burton			
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**FOREIGN PATENT DOCUMENTS** 

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### ATTACHMENT 1(g)

	ATTORNEY DOCKET NO.	APPLICATION NO.
	1720.1003D2	11/616,631
LIST OF ADDITIONAL SUBMITTED	FIRST NAMED INVENTOR	
DOCUMENTS	Seiji HACHISUKA et al.	
DOCUMENTS	FILING DATE	GROUP ART UNIT
	December 27, 2006	2858

The following document(s) is/are listed in accordance with the duty of disclosure provisions of 37 CFR § 1.56, so that the Examiner may consider same should he deem any thereof to be material to examination of the subject application.

It is requested that the Examiner acknowledge his consideration of document(s) below-listed by initialling same in the space provided adjacent each such application and that the Examiner sign and date this form at the bottom thereof to confirm such consideration having been given.

This submission in no way represents an admission that any of the information listed herein constitutes prior art with respect to the subject application; and unless and until such prior art status is established, this submission is not a request that the information presented herein be printed on the face of any patent issuing from the subject application in which this information is being filed.

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OTHER DO	CUME	NTS (Including Author, Title, Date, Pertinent Pages, Etc.)	TRANSI	NO
/JN/	AE	United States Patent and Trademark Office Action, mailed July 19, 2007 and issued in corresponding U.S. Patent Application No. 11/616,623		

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/Jeff Natalini/

Revised January, 2005

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### ATTACHMENT 1(g)

		1720.1003D2	11/616,631
•	LIST OF ADDITIONAL SUBMITTED DOCUMENTS	Seiji HACHISUKA et al.	
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The following document(s) is/are listed in accordance with the duty of disclosure provisions of 37 CFR § 1.56, so that the Examiner may consider same should he deem any thereof to be material to examination of the subject application.

It is requested that the Examiner acknowledge his consideration of document(s) below-listed by initialling same in the space provided adjacent each such application and that the Examiner sign and date this form at the bottom thereof to confirm such consideration having been given.

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**U.S. PATENT DOCUMENTS** 

*EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
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FOREIGN PATENT DOCUMENTS

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/JN/	AE	Office Action for related Chinese Application No. 03150194X dated June 17, 2005.	х

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#### Application/Control No. Applicant(s)/Patent Under Reexamination 11/616,631 HACHISUKA ET AL. Notice of References Cited Examiner Art Unit Page 1 of 1 JEFF NATALINI 2858 **U.S. PATENT DOCUMENTS Document Number** Date Name Classification Country Code-Number-Kind Code MM-YYYY US-4,985,819 01-1991 Mori et al. 363/37 US-2002/0158591 В 10-2002 Ribarich et al. 315/291 US-С US-D US-Ε F US-COPIES OF REFERENCES OF DERED US-G US-Н US-1 USκ US-US-L US-М FOREIGN PATENT DOCUMENTS **Document Number** Date Country Country Code-Number-Kind Code Name Classification MM-YYYY Ν О Р Q R s Т **NON-PATENT DOCUMENTS** Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) U W

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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